

Fig. 1

TCH229 MKSAK - G I E N - - - - - L A F V P S S P D I L R R - - - - - L S A S P S - - - - - Q I E V S A L S S D 38  
 SLC21A12 M P L H Q L G D K P - - - - - L T F P S P N S A M E N G - - - - - L D H T P P S R R A S P G T P L S P G 42  
 OATPRP4 M D E G T - G L Q P G A G E Q L E A P A T A E A V Q E R C E P E T L R S K S L P V L S S A S C - - - - - R P S L S P T S G D 56

TCH229 P Q R E - - - - - N S Q P Q E L Q K P Q E P Q K S P E P S L - P S A P P N V S E E K L - - - - - R S L S L S E F E E G S Y G 89  
 SLC21A12 S L R S - - - - - A A - - - - - H S P L D T S K Q P L C Q L W A E K H G A R G T H E V - - - - - R Y V S A G - - - - - Q S V A C G 87  
 OATPRP4 A N P A F G C V D S - - - - - S G H Q E L K Q G P N P L A - P S P S A P S T S A G L G D C N H R V D L S - - - - - K T F S V S 108

TCH229 W R N F H - - - - - P Q C L - Q R C N T P P G G F L L H Y C L L A V T Q G I V N G L V N I S I S T V E K R Y E M K S S L T 144  
 SLC21A12 W W A F A - - - - - P P C L - Q V L N T P K G I L F F L C A A A P L Q G M T V N G F I N T V I T S L E R R Y D L H S Y Q S 142  
 OATPRP4 - S A L A M L Q E R R C L Y V V L T D S R C F L V C M C F L T F I Q A L M V S G Y L S S V I T T I E R R Y S L K S S E S 167

TCH229 G L I S S Y D I S F C L S L F V S P F G G R G H K P R W L A F A A F M I G L G A L V F S L P Q F F S G E Y K L G S L 204  
 SLC21A12 G L I A S S Y D I A A C L C L T F V S Y F G G S G H K P R W L G W G V L L M G T G S L V F A L P H F T A G R Y E V E L D 202  
 OATPRP4 G L L V S C F D I G N L V V V F V S Y F G G R G R R P L W L A V G G L L I A F G A A L F A L P H F I S P P Y Q I Q E L 227

TCH229 F - - - - - E D T C V T T R N S T S C T S S T S S L S N - - - - - Y L Y V F I L G Q L L L G A G G T P L Y T L G T A 252  
 SLC21A12 A - - - - - G V R T C P A N P G A V C A D S T S G L S R - - - - - Y Q L V F M L G Q F L H G V G A T P L Y T L G V T 250  
 OATPRP4 N A S A P N D G L C Q G G N S T A T L E P P A C P K D S G G N N H W V Y L A L F I C A Q I L I G M G S T P I Y T L G P T 287

TCH229 F L D D S V P T H K S S L Y I G T G Y A M S I L G P A I G Y V L G G Q L L T I Y I D V A M G E S T D V T E D D P R W L G 312  
 SLC21A12 Y L D E N V K S S C S P V Y I A I F Y T A I L G P A A G Y L I G G A L L N I Y T E - - - - - M G R R T E L T T E S P L W V G 308  
 OATPRP4 Y L D D N V K K E N S S L Y L A I M Y V M G A L G P A V G Y L L G G L L I G F Y V D - - - - - P R N P V H L D Q N D P R F I G 345

TCH229 A W W I G F L L S W I F A W S L I I P F S C F P K H L P G T A E - - - - - I Q A G K T S Q A H Q - - - - - S N S N - - - - - 359  
 SLC21A12 A W W V G F L G S G A A A F T A V P I L G Y P R Q L P G S Q R - - - - - Y A V M R A A E M H Q L K D S S R G E A - - - - - 360  
 OATPRP4 N W W S G F L L C A I A M P L V I F P M F T F P K K L P P R H K K K K K K P S V D A V S D D D V L K E K S N S E Q A 405

TCH229 - - - - - A D V K F G K S I K D P P A A L K N L M K N A V F M C L V L S T S S E A L I T T G F A T F L P K F I E N Q F G L 415  
 SLC21A12 - - - - - S N P D F G K T I R D L P L S I W L L L K N P T F I L L C L A G A T E A T L I T G M S T F S P K F L E S Q F S L 416  
 OATPRP4 D K K V S S M G F G K D V R D L P P R A A V R I L S N M T F L F V S L S Y T A E S A I V T A F I T F I P K F I E S Q F G I 465

TCH229 T S F A A T L G G A V L I P G A A L Q I L G G F L V S K F R M T C K N T M K F A L F T S G V A L T - L S F V F M Y A 474  
 SLC21A12 S A S E A A T L F G Y L V V P A G G G T F L G G F F V N K L R L R G S A V I K F C L F C T V V S L L - G I L V F S - L 474  
 OATPRP4 P A S N A S I Y T G V I I V P S A G V G I V L G G Y I I K K L K L G A R E S A K L A M I C S G V S L L C F S T L F I - V 524

Fig. 2

TCH229	K C E N E P F A G V S E S Y N G T - - - G E L - - - G N L I A P C N A N C [C] S R S Y Y Y P V C G - D G V Q Y F S 524
SLC21A12 H C P S V P M A G V T A S Y G G S L L P E G H L - - - - N L T A P C N A A C S C Q P E H Y S P V C G S D G L M Y F S 528	
OATPRP4 G C E S I N L G G I N I P Y T T G - - - P S L T M P H R - N L T G S C N V N C G C K I H E Y P V C G S D G I T Y F N 579	
TCH229 P [C] F A G C S N P V A - H R K - - P K V Y Y N C S [C] I E R K T E I T S T A E T - - - - F G F E A 565	
SLC21A12 L C H A G C P A A T E - T N V D G Q K V Y R D C S C I P - - - - Q N L S S G - - - - F G - H A 565	
OATPRP4 P [C] L A G C V N S G N L S T G - - I R N Y T E C T [C] V Q S R Q V I T P T V G Q R S Q L R V V I V K T Y L N E N G - Y A 636	
TCH229 K A G K C E T H [C] A K L P I F L C I F F I V I I F T P M A G T P I T V S I L R C [V] N H R Q R S L A L G I Q F M V L R L L 625	
SLC21A12 T A G K C T S T C Q R K P L L V F I F V V I F F T P L S S I P A L T A T L R C V R D P Q R S F A L G I Q W I V V R I L 625	
OATPRP4 V S G K C K R T [C] N T L I P F L V F L F I V T F I T A C A Q P S A I I V T L R S V E D E E R P F A L G M Q F V L L R T L 696	
TCH229 G T I P G P I I F G P T I D S T [C] I L W D I N D C G I K G A C W I Y D N I K M A H M L V A I S V T C K V I T M F F N G F 685	
SLC21A12 G I P G P I A F G W V I D K A C L L W Q - D Q C G Q Q G S C L V Y Q N S A M S R Y I L I M G L L Y K V L G V L F F A I 684	
OATPRP4 A Y I P T P I Y F G A V I D T T C M L W Q - Q E C G V Q G S C W E Y N V T S F R F V Y F G L A A G L K F V G F I F - - 752	
TCH229 A I F L - - - - Y K - - - - P P P S A T D V S F - - - - 701	
SLC21A12 A C F L - - - - Y K - - - - P L S E S S D - G L - - - - 699	
OATPRP4 - I F L A W Y S I K Y K E D G L Q R R R Q R E P P L S T V S E - R V G H P D N A R T R S C P A F S T Q G E F H E E T G L 810	
TCH229 - - - - - H K - - - - E N A V V T N V L A E Q - - D [N] K I V K E G . 725	
SLC21A12 - - - - - E T C L P S Q S S A P D S A T D S - - Q L Q S S V 722	
OATPRP4 Q K G I Q C A A Q T Y P G P F P E A - - - I S S A D P G L E E S P A A L E P P S 848	

Fig. 3

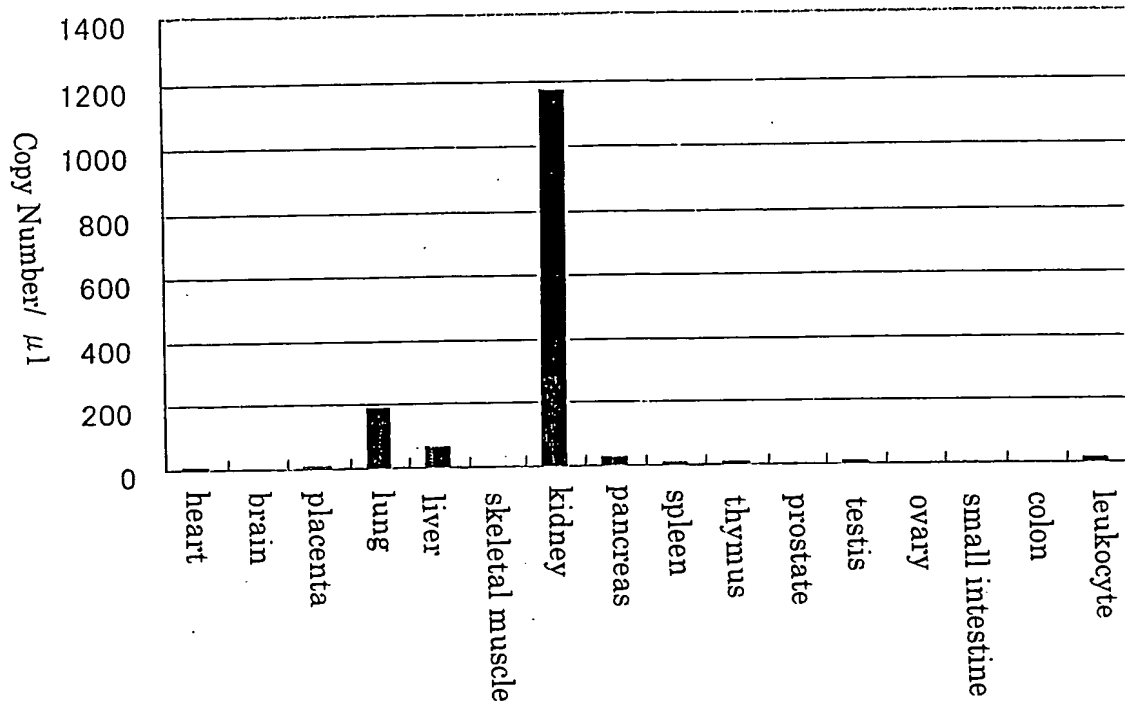


Fig. 4

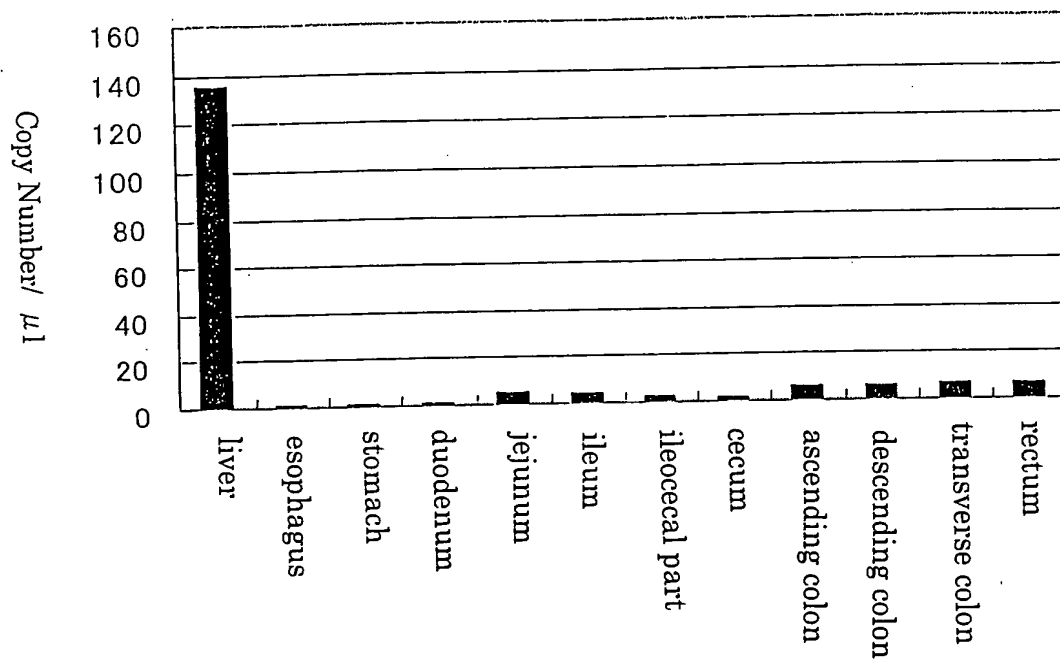


Fig. 5

TCH229 M K S A K G I E N L A F V P S S P D I L R R L S A S P S Q I E V S A L S S D P Q R E N S Q P Q E L O 50  
 mTCH229 M Q G S K G I E N P A F V P S S P G T P R R A S A S P S Q V E V S A V A S R N Q N G G S Q P R E - - 48

TCH229 K P Q E P Q K S P E P S L P S A P P N V S E E K L R S L S L S E F E E G S Y G W R N F H P Q C L Q R 100  
 mTCH229 - S E E P Q K S T E P S P S S N P P A S D E P - P G S Q L S E L E E G P C G W R G F H P Q C L Q R 96

TCH229 C N T P G G F L L H Y C L L A V T Q G I V V N G L V N I S I S T V E K R Y E M K S S L T G L I S S S 150  
 mTCH229 C N T P Q G F L L H Y C L L A L T Q G I V V N G L V N I S I S T I E K R Y E M K S S L T G L I S S S 146

TCH229 Y D I S F C L L S L F V S F F G E R G H K P R W L A F A F M I G L G A L V F S L P Q F F S G E Y K 200  
 mTCH229 Y D I S F C V L S L F V S F F G E R G H K P R W L A F A S F M I G L G A L V F S L P H F F S G R Y E 196

TCH229 L G S L F E D T C V T T R N S T S C T S S T S S L S N Y L Y V F I L G Q L L L G A G G T P L Y T L G 250  
 mTCH229 L G S I F E D T C L T - R N S T R C S S S T S L S N Y F Y V F V L G Q L L L G T G G T P L Y T L G 245

TCH229 T A F L D D S V P T H K S S L Y I G T G Y A M S I L G P A I G Y V L G G Q L L T I Y I D V A M G E S 300  
 mTCH229 T A F I D D S V P T H K S S L Y I G I G Y S M S I L G P A I G Y V L G G Q L L T M Y I D I A M G Q S 295

TCH229 T D V T E D D P R W L G A W W I G F L L S W I F A W S L I I P F S C F P K H L P G T A E I Q A G K T 350  
 mTCH229 S D L T E D D P R W L G A W W I G F L L A W L F A W S L I M P F S C F P K H L P G T A K I Q A G K T 345

TCH229 S Q A H Q S N S N A - - - D V K F G K S I K D F P A A L K N L M K N A V F M C L V L S T S S E A L 396  
 mTCH229 S Q T H Q N N S T S F Q H T D E N F G K S I K D F P T A V K N L M R N T V F I C L V L S T T S E A L 395

TCH229 I T T G F A T F L P K F I E N Q F G L T S S F A A T L G G A V L I P G A A L G Q I L G G F L V S K F 446  
 mTCH229 I T T G F A T F L P K F I E N Q F G L T S S F A A T L G G A V L I P G A A L G Q I L G G V L V S K F 445

TCH229 R M T C K N T M K F A L F T S G V A L T L S F V F M Y A K C E N E P F A G V S E S Y N G T G E L G N 496  
 mTCH229 K M K C K N T M K F A L C T S G V A L V L S F V F I Y A K C E N E P F A G V S E S Y N G T G E H G N 495

TCH229 L I A P C N A N C N C S R S Y Y Y P V C G - D G V Q Y F S P C F A G C S N P V A H R K P K V Y Y N C 545  
 mTCH229 L T A P C N A N C N C L R S Y Y Y P L C G S D G I Q Y F S P C F A G C L N S V S N R K P K V Y Y N C 545

TCH229 S C I E R K T E I T S T A E T F G F E A K A G K C E T H C A K L P I F L C I F F I V I I F T F M A G 595  
 mTCH229 S C I E R - - K I T S T A E S T D F E A K A G K C R T R C S N L P I F L G I F F I T V I F T F M A G 593

TCH229 T P I T V S I L R C V N H R Q R S L A L G I Q F M V L R L L G T I P G P I I F G F T I D S T C I L W 645  
 mTCH229 T P I T V S I L R C V N H R H R S L A L G V Q F M L L R L L G T I P G P I I F G V I I D S T C V L W 643

TCH229 D I N D C G I K G A C W I Y D N I K M A H M L V A I S V T C K V I T M F F N G F A I F L Y K P P P S 695  
 mTCH229 D V N E C G I K G A C W I Y D N I K M A H M L V A I S V T C K V I T I F F N G L A I V L Y K P P P P 693

TCH229 A T D V S F H K E N A V V T N V L A E Q D L N K I V K E G . 725  
 mTCH229 G T E V S F Q S Q N V I V S T I S V E E D L D K A E N E G . 723

6/17

Fig. 6

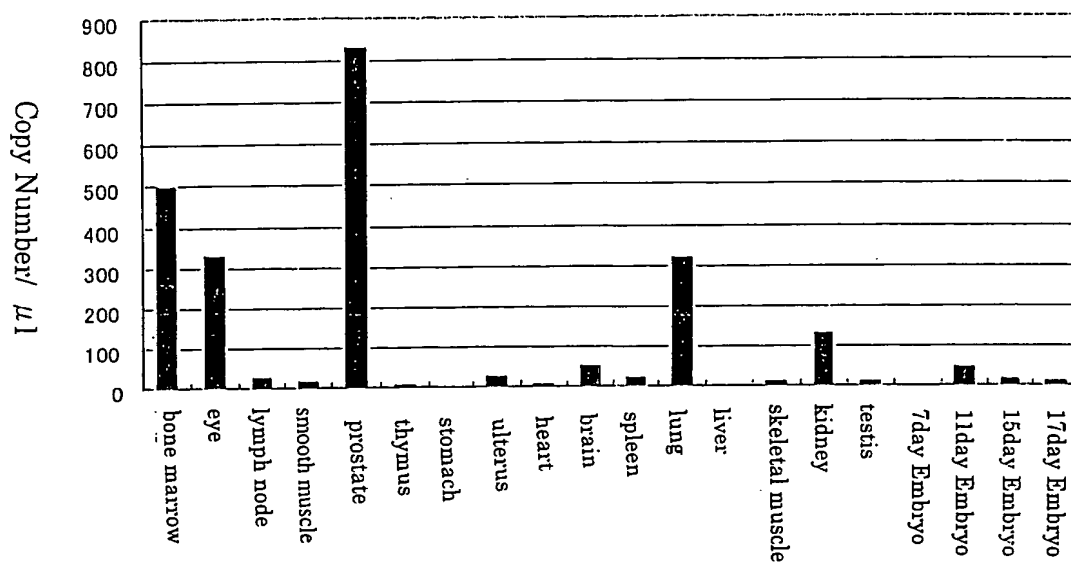


Fig. 7

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8/17

Fig. 8

TCH229	G E L G N L I A P C N A N C N C S R S Y Y Y P V C G - D G V Q Y F S P C F A G C S N P V A	535
rTCH229No.1	G E M G N L T A P C N A N C N C L R S Y Y Y P L C G S D G V Q Y F S P C F A G C L N S V S	535
rTCH229No.2	G E M G N L T A P C N A N C N C L R S Y Y Y P L C G S D G V Q Y F S P C F A G C L N S V S	535

TCH229	H R K P K V Y Y N C S C I E R K T E I T S T A E T F G F E A K A G K C E T H C A K L P I F	580
rTCH229No.1	N R K P K A Y Y N C S C I E R K V D I T S T A E S P D F E A R A G K C K T Q C S N L P I F	580
rTCH229No.2	N R K P K A Y Y N C S C I E R K V D I T S T A E S P D F E A R A G K C K T Q C S N L P I F	580

	TM10										*	
TCH229	L C I F F I V I I F T F M A G T P I T V S I L R C V N H R Q R S L A L G I Q F M V L R L L	625										
rTCH229No.1	L G I F F I T V I F T F M A G T P I T V S I L R C V N H R Q R S L A L G V Q F M L L R L L	625										
rTCH229No.2	L G I F F I T V I F T F M A G T P I T V S I L R C V N H R Q R S L A L G V Q F M L L R L L	625										

	TM11										
TCH229	G T I P G P I I F G F T I D S T C I L W D I N D C G I K G A C W I Y D N I K M A H M L V A	670									
rTCH229No.1	G T I P G P I I F G V T I D S T C V L W D I N E C G T K G A C W I Y D N I R M A H M L V A	670									
rTCH229No.2	G T I P G P I I F G V T I D S T C V L W D I N E C G T K G A C W I Y D N I R M A H M L V A	670									

	TM12										
TCH229	I S V T C K V I T M F F N G F A I F L Y K P P P S A T D V S F H K E N A V V T N V L A E Q	715									
rTCH229No.1	I S V T C K V I T I F F N G L A I V L Y K P P P P G T E V S F Q S Q N V V S T I T V E E	715									
rTCH229No.2	I S V T C K V I T I F F N G L A I V L Y K P P P P G T E V S F Q S Q N V V S T I T V E E	715									

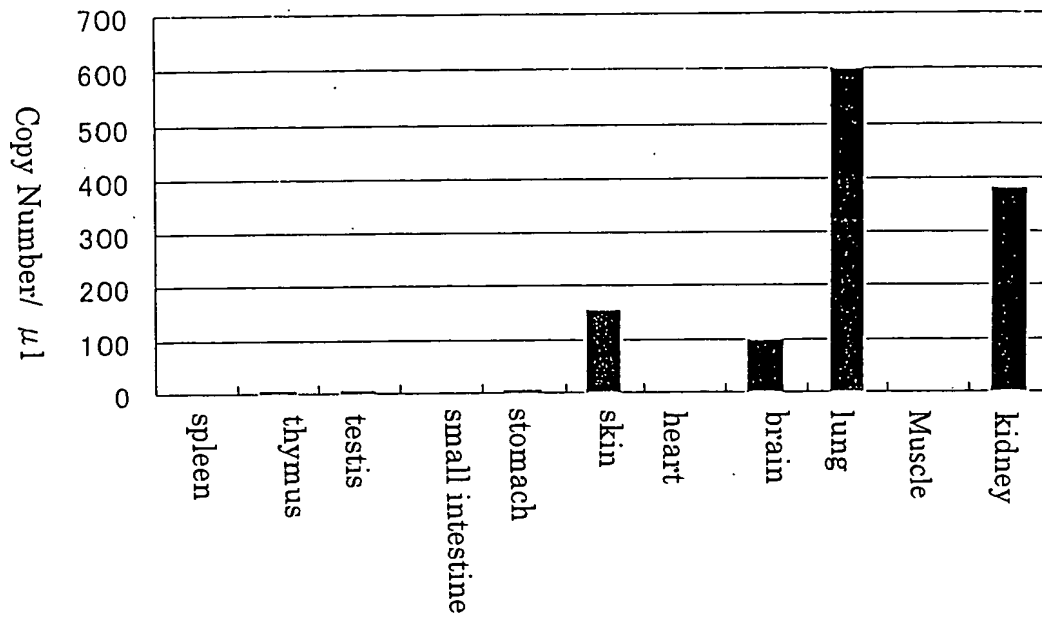
  

TCH229	D L N K I V K E G .	725
rTCH229No.1	D L N K I E N E G .	725
rTCH229No.2	D L N K I E N E G .	725



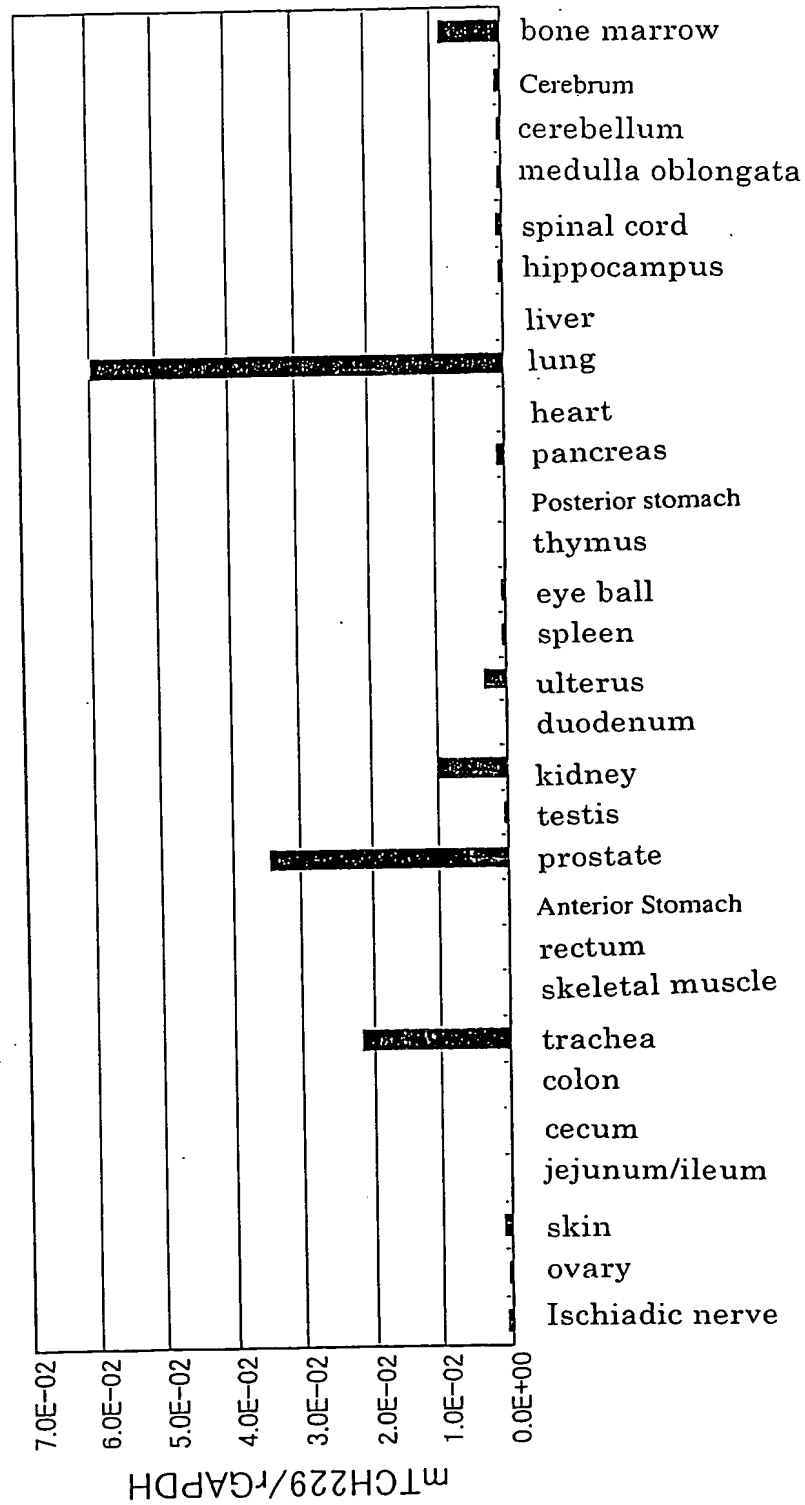
9/17

Fig. 9



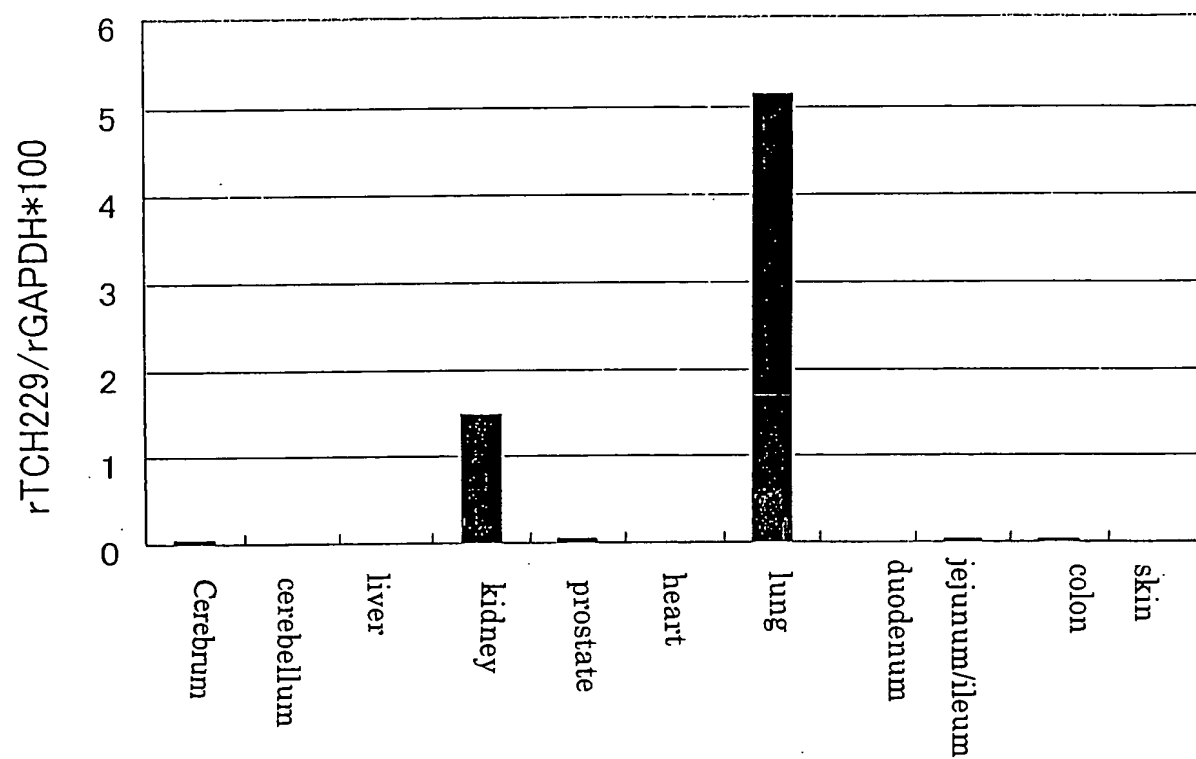
10/17

Fig. 10



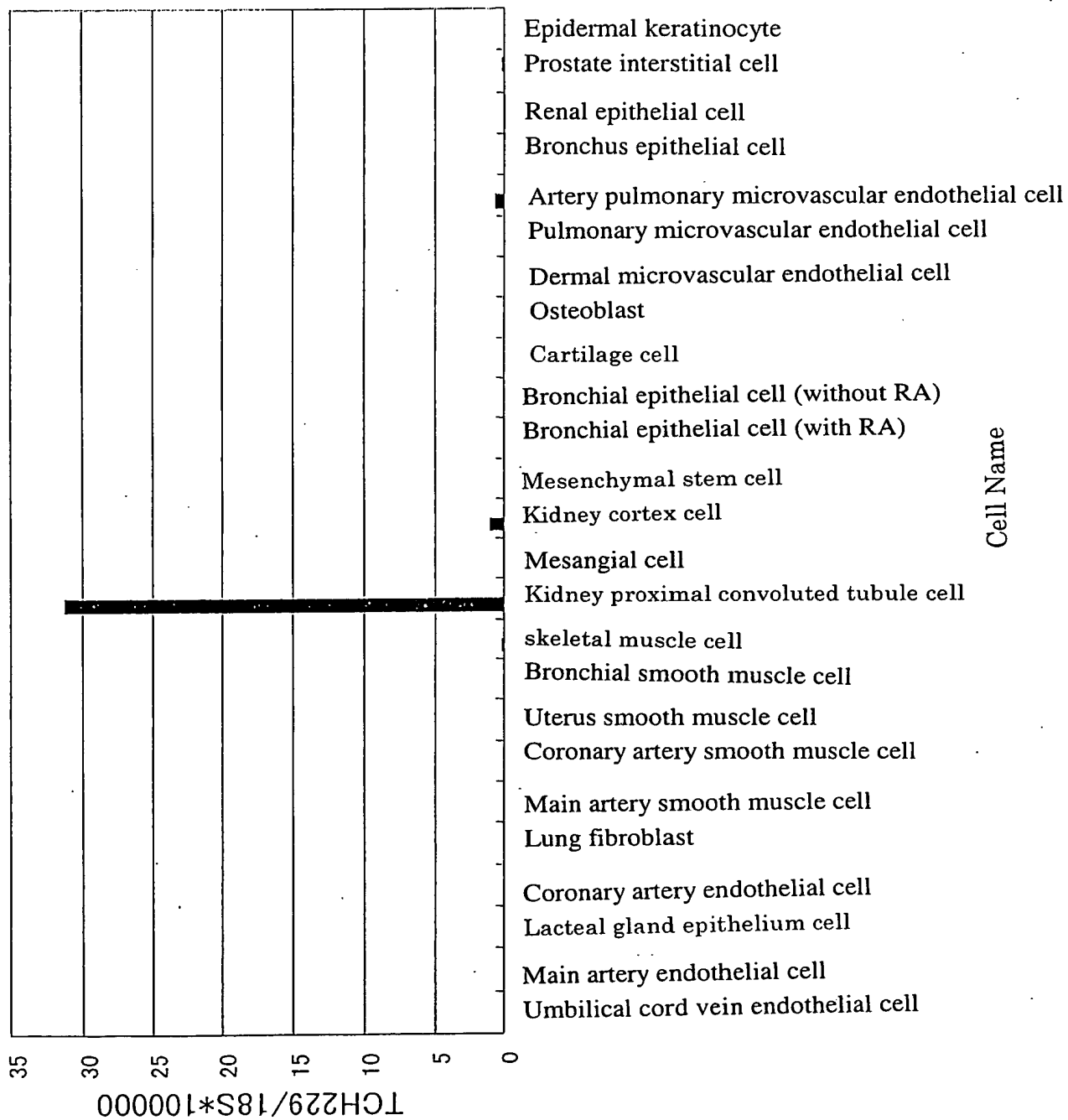
11/17

Fig. 11



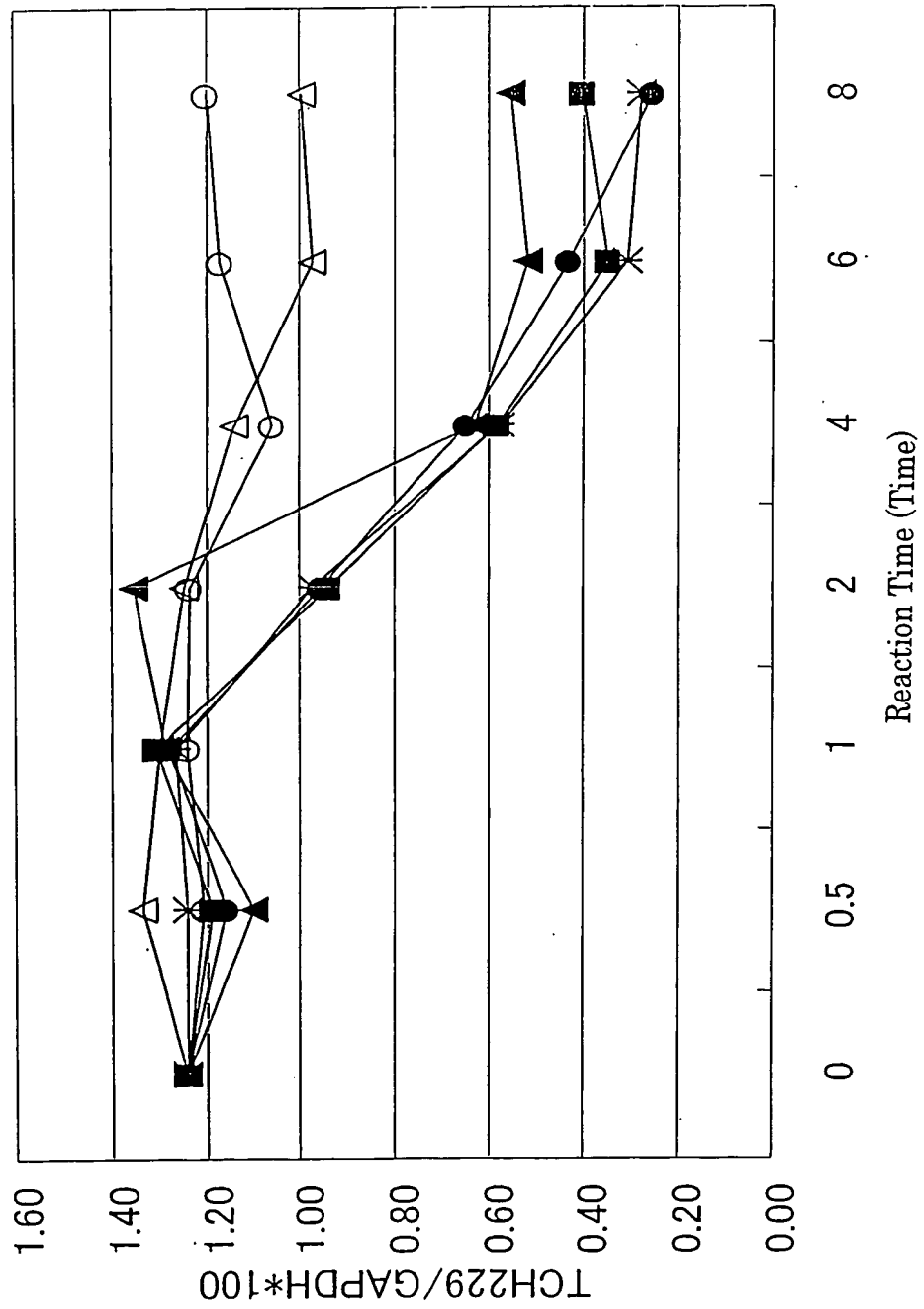
12/17

Fig.12



13/17

Fig. 13



14/17

Fig. 14

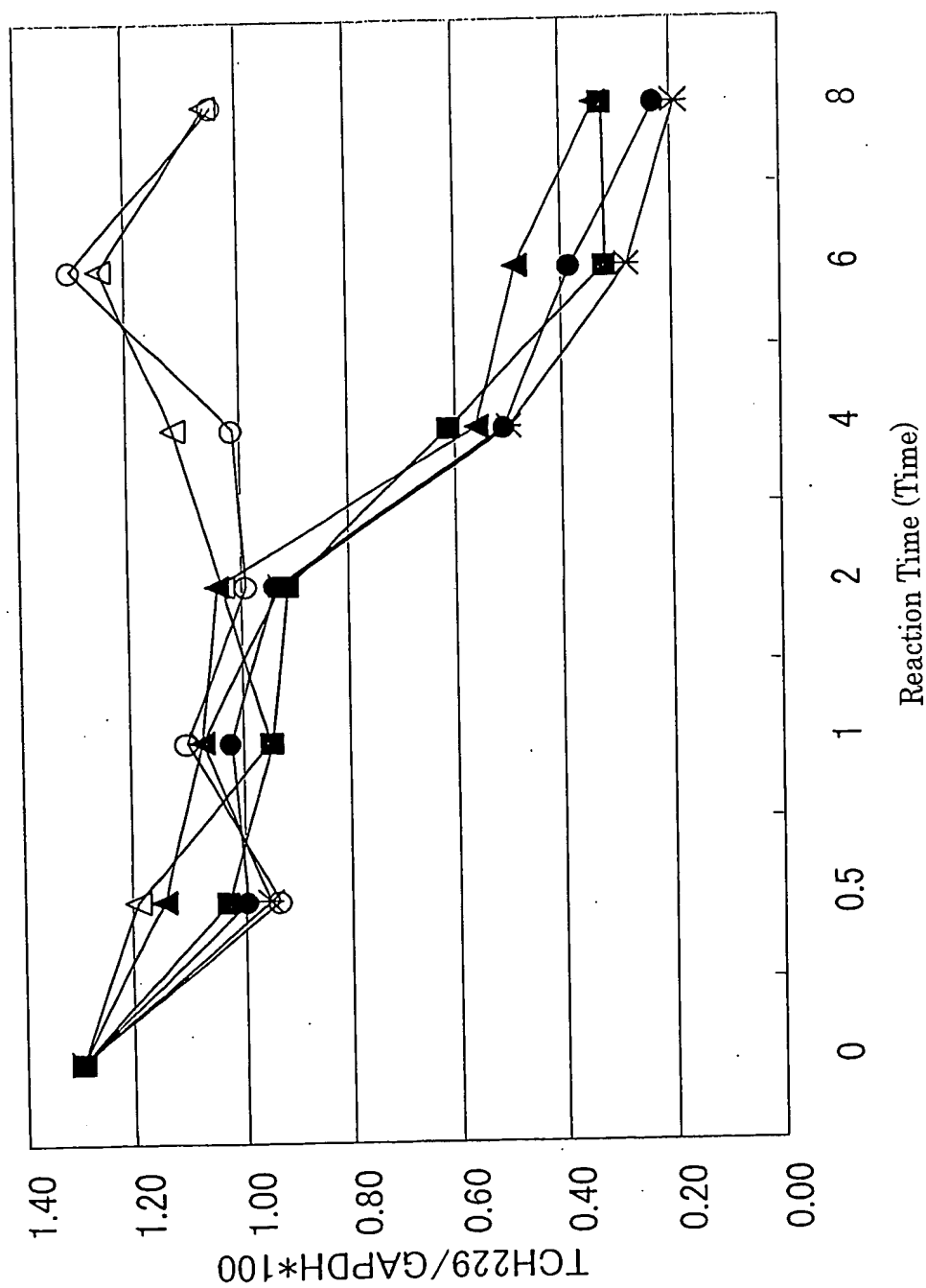


Fig. 15

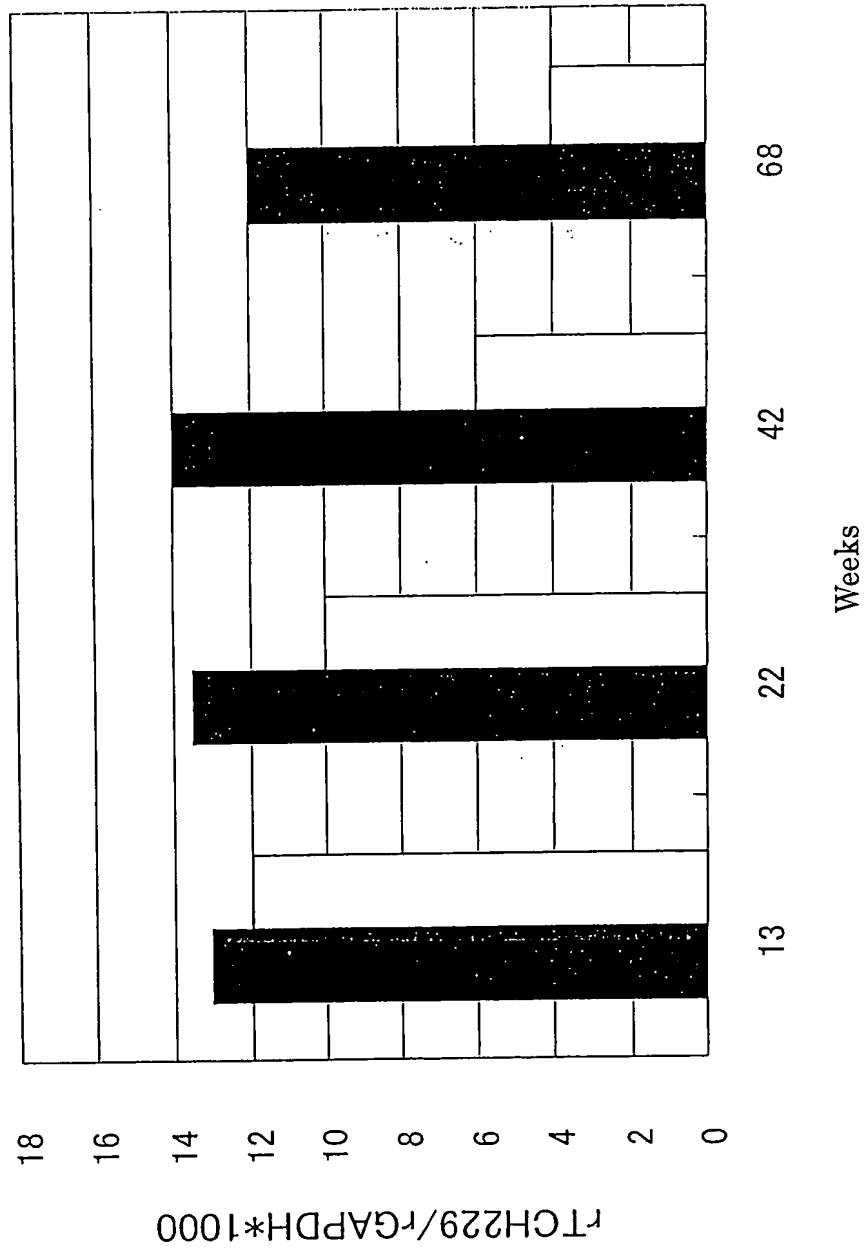


Fig. 16

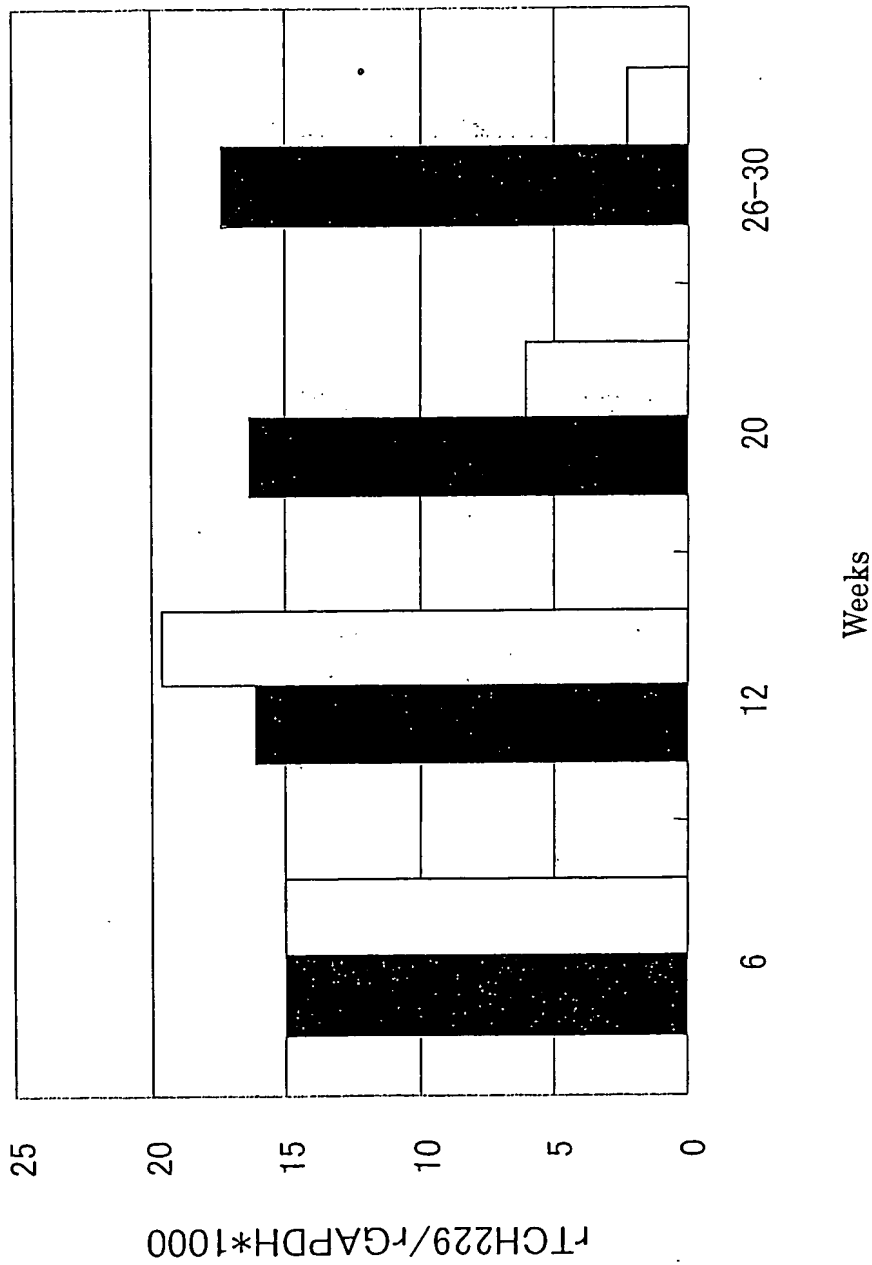
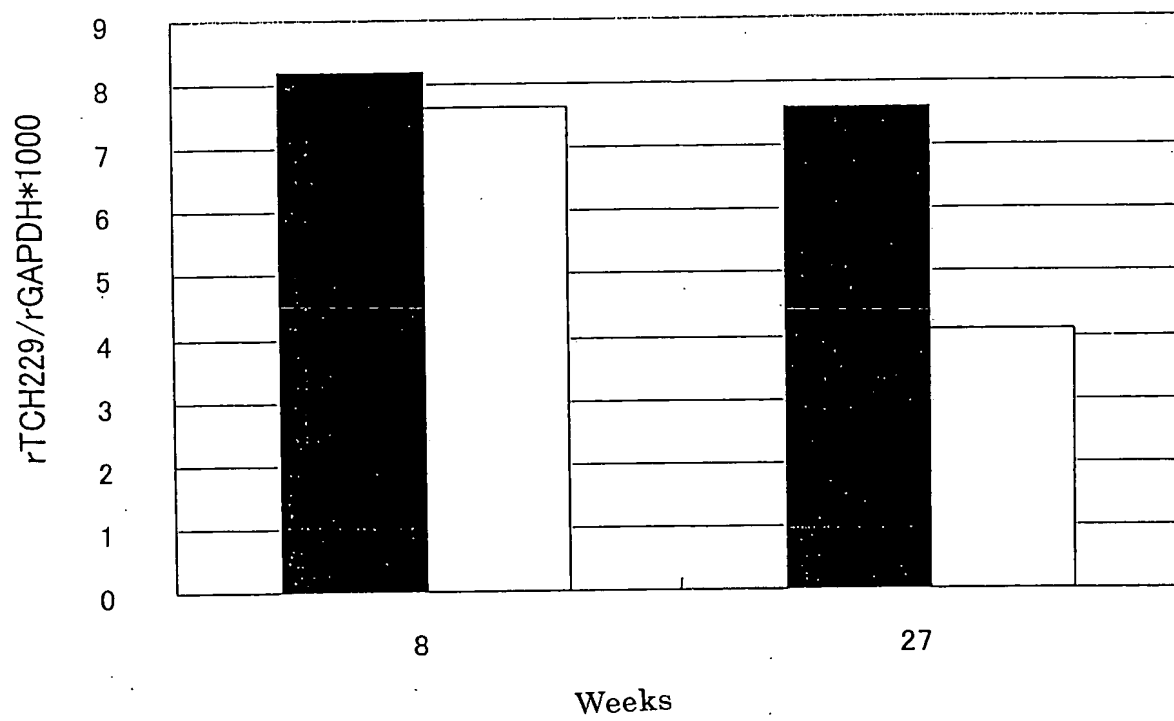




Fig. 17



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